

AMENDMENTS TO THE CLAIMS

1-10. **Canceled**

11. **(Currently Amended)** A method for preventing surgical adhesions of tissue which comprises applying to tissue involved in surgery a biomaterial comprised of at least one auto-crosslinked derivative of an hyaluronic acid with an average molecular weight of 150,000 to 730,000 Daltons, wherein 4.5 to 5% of the carboxyl group of hyaluronic acid are cross-linked to the hydroxyl group of the same or different hyaluronic acid molecule, wherein said cross-linked derivative has a viscosity of at least 200 Pa*sec⁻¹ to 450 Pa*sec⁻¹.

12. **(Withdrawn)** The method according to claim 11, wherein said derivative is the total benzyl ester in which all of the carboxyl groups of hyaluronic acid are esterified with a benzyl group.

13. **(Withdrawn)** The method according to claim 11, wherein said derivative is a benzyl ester wherein 80% of the carboxyl groups are esterified with a benzyl group.

14. **(Withdrawn)** The method according to claim 11, wherein said derivative is a benzyl ester wherein 75% of the carboxyl groups are esterified with a benzyl group and the remaining 25% carboxyl groups are esterified with the aliphatic residue of a C₁₀₋₂₀ aliphatic alcohol.

16. **(Previously Presented)** The method according to claim 11, wherein said viscosity is at least 250 Pa^{*}sec⁻¹.
17. **(Previously Presented)** The method according to claim 11 wherein said biomaterial further comprises a non-biodegradable synthetic polymer.
18. **(Previously Presented)** The method according to claim 17, wherein said synthetic polymer is at least one member selected from the group consisting of polypropylene, polyethylene, polyester and polytetrafluoroethylene.
19. **(Previously Presented)** The method according to claim 11, wherein said biomaterial is in the form of a gel, a membrane, a mesh or a woven or non-woven tissue.
20. **(Previously Presented)** The method according to claim 11, wherein said biomaterial further comprises a biologically active agent.
21. **(Previously Presented)** The method of claim 20 wherein said biologically active agent is selected from the group consisting of steroidal and non-steroidal antiinflammatories, fibrinolytics, hemostatics, antithrombotics, growth factors, antitumorals, antibacterials, antivirals and antifungals.
22. **(Previously Presented)** The method of claim 11 wherein the viscosity of said cross-linked derivative is at least 350 Pa^{*} Sec⁻¹.

23. **(Previously Presented)** The method of claim 11 wherein the viscosity of said cross-linked derivative is at least 300 Pa^{*} Sec⁻¹.

24. **(Original)** The method of claim 11 wherein said surgery is selected from the group consisting of abdominal, laparoscopic , laparotomic, intestinal, gynecologic, abdominalpelvic, peritoneal, urogenital, orthopedic, spinal/dura mater, tendon/nerve, including carpal tunnel, cardiovascular, thoracic, ophtalmic, oncologic, plastic, esthetic, ENT, paranasal sinuses, and transplantation.

25. **(Previously Presented)** The method of claim 11, wherein the viscosity of said cross-linked derivative is at least 400 Pa^{*} Sec⁻¹.

26. **(Previously Presented)** The method of claim 11, wherein said auto-crosslinked derivative of an hyaluronic acid has an average molecular weight of 150,000 to 450,000 Daltons